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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/664,848	09/22/2003	John R. Condon		6549

7590 03/21/2005
John R. Condon
15571 Oatfield Rd.
Portland, OR 97267

EXAMINER

BERMAN, SUSAN W

ART UNIT	PAPER NUMBER
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1711

DATE MAILED: 03/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/664,848

Applicant(s)

CONDON, JOHN R.

Examiner

Susan W Berman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

Information Disclosure Statement

The information disclosure statement filed 01-13-2004 fails to comply with 37 CFR 1.98(a)(1), which requires the following: (1) a list of all patents, publications, applications, or other information submitted for consideration by the Office; (2) U.S. patents and U.S. patent application publications listed in a section separately from citations of other documents; (3) the application number of the application in which the information disclosure statement is being submitted on each page of the list; (4) a column that provides a blank space next to each document to be considered, for the examiner's initials; and (5) a heading that clearly indicates that the list is an information disclosure statement. The information disclosure statement has been placed in the application file, but the information referred to therein has not been considered.

Copies of non-patent literature should be submitted with the I.D.S. for consideration by the examiner.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 2-4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

There is no antecedent basis in claim 1 for the recitation "the substrate" in claims 2-4. Claim 1 recites only a "molecule or molecular complex". The claims might be rewritten to recite "the initiator of claim 1 comprising a molecular complex and a substrate wherein the substrate is a ceramic particle", if this is what applicant intends to claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1, 4 and 5 are rejected under 35 U.S.C. 102(e) as being anticipated by Yamato et al (6,673,850). Yamato et al disclose photoinitiators having more than one photoinitiating moiety and sensitive to wavelengths from 200 to 600 nm for photopolymerizing ethylenically unsaturated compounds (Abstract and column 19, lines 18-28).

Claims 1, 4 and 5 are rejected under 35 U.S.C. 102(a) as being anticipated by WO 00/68218 (Yamato et al). Yamato et al disclose photoinitiators having more than one photoinitiating moiety and sensitive to wavelengths from 200 to 600 nm for photopolymerizing ethylenically unsaturated compounds (Abstract and column 19, lines 18-28).

Claims 1, 3, 4 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Chudzik et al (6,156,345). Chudzik et al disclose crosslinkable macromers including one or more polymer-pendent

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initiator groups for photopolymerizing ethylenically unsaturated monomers. Initiating groups disclosed include camphorquinone and other visible light activatable molecules (column 4, lines 4-5, column 6, lines 7-16). Macromeric backbones and polymeric backbones are taught (column 4, lines 62-65, and column 5, lines 43-49).

Claims 1, 3, 4 and 5 are rejected under 35 U.S.C. 102(e) as being anticipated by De Groot et al (6,747,090). De Groot et al disclose compositions comprising water-soluble polymers bearing vinyl groups and a polymeric water-soluble photoinitiator sensitive to wavelengths greater than about 305 nm. See column 5, line 50, to column 6, line 11, column 6, lines 46-62, and Example 1C.

Claims 1, 4 and 5 are rejected under 35 U.S.C. 102(a) as being anticipated by WO 00/55214. WO '214 discloses a polymeric water-soluble photoinitiator sensitive to wavelengths greater than about 305 nm for photopolymerizing ethylenically unsaturated compounds. See page 3, lines 10-24, page 4, lines 13-16, and Examples 1 and 2.

Claims 1-5 are rejected under 35 U.S.C. 102(e) as being anticipated by Swan et al (6,669,994). Swan et al teach coating a substrate with a coating agent that provides photoactive groups to the surface of the substrate for subsequent photoinitiation. See the Abstract, column 3, lines 9-53, column 4, lines 7-27 and lines 50-67. Swan et al teach that a wide variety of support surfaces, including ceramics, can be used (column 7, lines 38-52, and column 16, lines 12-37).

Claims 1 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Ohwa et al (6,022,906). Ohwa et al disclose photoinitiators having multiple initiating moieties (see formula (II), (III) or (IV)). UV or visible light can be used to photocrosslink materials using the disclosed photoinitiators.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Bany et al (4,677,137) disclose supported photoinitiators. Illsley et al (6,296,986) disclose a

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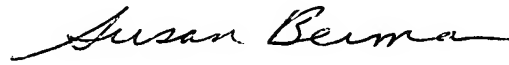
multifunctional photoinitiator obtained from a multifunctional core material and sensitive to UV light.

Herlihy (US 2005/0014860) discloses multifunctional thioxanthone photoinitiators sensitive to UV light.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susan W Berman whose telephone number is 571 272 1067. The examiner can normally be reached on M-F 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 571 272 1078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Susan W Berman
Primary Examiner
Art Unit 1711

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March 16, 2005